

REMARKS

Upon entry of the instant Amendment, claims 1-4 and 7-22 will be pending in the application. By this amendment, claims 1, 9 and 10 are amended and claims 13-22 are added for the Examiner's consideration. Support for the claim amendments can be found on paragraph [0245] of the instant published application No. 2004/0090955. Support for the new claims can be found on paragraphs [0134], [0159], [0164], [0206] and [0241] of the instant published application No. 2004/0090955. Reconsideration of the rejected claims in view of the following remarks is respectfully requested.

Advisory Action

Applicant acknowledges the Advisory Action dated June 27, 2008 which indicated that the Rule 1.116 Amendment filed on June 4, 2008 was entered and considered.

Telephone Interview

Applicant appreciates the courtesy extended by Examiner Russell in the Telephone Interview of July 21, 2008.

In the Interview, Applicant proposed possible amendments to the claims to place the application in condition for allowance, and indicated that the proposed amendments would be filed with an RCE.

The Examiner agreed to review the proposed claim amendments filed with the RCE and to discuss the same with her supervisor. Finally, the Examiner agreed to contact Applicant's representative upon receiving the Response to discuss the same with the aim of placing the application in condition for allowance.

Applicant also notes that while Applicant has amended claims 1, 9 and 10 in an effort to advance prosecution, Applicant is not conceding in this application that the previously presented claims are not patentable over the art cited by the Examiner. The present claim amendments are only for facilitating expeditious prosecution of possible allowable subject matter and/or to obtain earlier allowance. Applicant respectfully

reserves the right to pursue these and other claims in one or more continuation patent applications.

35 U.S.C. §102 Rejection

Claims 1-4 and 7-12 were rejected under 35 U.S.C. §102(e) for being anticipated by U.S. Patent No. 7,133,365 issued to Klinker, *et al.* ("Klinker"). This rejection is respectfully traversed.

In accordance with the guidelines set forth in MPEP 2131:

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicant submits that the reference applied by the Examiner does not show each and every feature of the claimed invention for the reasons already made of record, and for the additional reasons set forth below.

Claims 1, 9, and 10

Claim 1 recites, in pertinent part:

... determining whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router...and
basing a routing decision on the bandwidth usage of the link to said next hop router,
wherein the bandwidth usage is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time.

Claim 9 recites, in pertinent part:

... means for determining whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router...
wherein the router bases a routing decision on the bandwidth usage of the link to said next hop router, and

wherein the bandwidth usage is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time.

Claim 10 recites, in pertinent part:

... third program instructions to determine whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router...

wherein a routing decision is based on the bandwidth usage of the link to said next hop router, and

wherein the bandwidth usage is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time.

The Examiner asserts that Klinker includes the feature of determining whether or not transmission of a datagram on a link to the next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with the next hop router.

Applicant disagrees. Klinker appears to determine whether a data traffic flow meets one or more rules associated with a flow policy. (Col. 7, line 65 – Col. 8, line 5.) The rules define acceptable routing behavior associated with a traffic flow, for example, by defining the maximum bandwidth usage associated with a specific provider, the range of acceptable service providers, etc. (Col. 8, lines 7-21.)

This flow control system includes a usage collector, which is configured to monitor usage characteristics such as the load and available capacity of each network service provider (NSP). (Col. 10, lines 18-28.) The usage collector is comprised of a raw collector, utilization monitor, and bill reconstructor. (Fig. 12.) The raw collector sends a query to collect interface raw byte counters from routers on each of the provider circuits at a specified sampling interval. (Col. 20, lines 33-36.) This raw byte information is sent to the utilization monitor, which calculates the ingress and egress circuit utilization for each provider and determines whether bandwidth is increasing or decreasing in size for a given service provider. (Col. 20, lines 42-51.) The bill reconstructor then uses the raw byte counters and the provider's billable rates for the current billing period to generate an estimated bill, which is sent to a controller for use in

peak avoidance and least cost routing. (Col. 20, lines 52-66.) In addition to using the estimated bill for peak avoidance and least cost routing, the controller may also use the billing information to determine whether a route has free bandwidth, i.e., the route does not incur additional cost to use. (Col. 21, lines 6-10.) If a route has no free bandwidth and/or exceeds a flow policy, then traffic flow may be changed to a better performing path. (Col. 8, line 63 – Col. 9, line 4; Col. 26, lines 53-60.)

Furthermore, Klinker has not been shown to disclose that a routing decision is based on the bandwidth usage of the link to said next hop router. Again, even assuming that Klinker makes a routing determination, Klinker does so for a given service provider and not one that is based on the bandwidth usage of the link to said next hop router.

Finally, Klinker has not been shown to disclose or suggest, that the bandwidth usage is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time. Applicant notes that this language was added by the instant amendment in an effort to even more clearly distinguish the invention over the applied documents and obtain early allowance. To the extent that the Examiner finds disclosure in Klinker which arguably disclose or suggest this added feature, the Examiner is invited to contact Applicant's representative to discuss the same with an aim toward advancing prosecution and obtaining allowance of the instant application.

Accordingly, Applicant respectfully requests that the rejection over claims 1, 9, and 10 be withdrawn.

Dependent Claims

Claims 2-4, 7-8, and 11-12 are dependent claims, depending on independent claims 1, 9, and 10. For this reason, Applicant submits that these claims are thus distinguishable based on independent claims 1, 9, and 10. Applicant further submits that these claims also include subject matter which is distinguishable from Klinker.

Claim 2

Claim 2 recites, in pertinent part:

...updating the bandwidth threshold associated with said other, chosen next hop router with a larger, predefined bandwidth threshold...

Applicant submits that Klinker does not update a bandwidth threshold associated with the chosen next hop router with a larger predefined bandwidth threshold. Klinker determines whether a route has free bandwidth before using the route. If the route does not have free bandwidth then an alternative route is determined based in part on a route's free bandwidth and the cost associated with the routing. (Col. 21, lines 1-10.) In other words, if a specific route between NSPs is not available then Klinker will keep looking for another low cost route that meets existing flow policies. Klinker does not update the bandwidth threshold associated with the next hop router with a larger predefined bandwidth threshold. Accordingly, Applicant respectfully submits that claim 2 is not anticipated.

Claim 3

Claim 3 recites, in pertinent part:

... adding a bandwidth usage associated with said next hop router immediately before transmission of said datagram on said link to said next hop router to a bandwidth usage required for transmission of said datagram on said link to said next hop router...

The Examiner asserts that Klinker adds bandwidth usage, associated with the next hop router immediately before transmitting the datagram on a link to the next hop router, to the bandwidth usage required for transmitting the datagram on the link to the next hop router. However, Applicant respectfully submits that the passage cited by the Examiner does not include this feature. More specifically, the passage merely lists details of what may be included in the NSP configuration information. (Col. 20, lines 21-31.) This configuration information includes data representing utilization trends for use with short range forecasting models, e.g., to determine whether bandwidth is trending

up or down. (Col. 20, lines 46-51.) However, Klinker does not include adding bandwidth usage associated with the next hop router immediately before transmitting the datagram on a link to the next hop router. Accordingly, Applicant respectfully submits that claim 2 is not anticipated. Accordingly, claim 3 is not anticipated.

Claim 4

Claim 4 recites, in pertinent part:

... wherein the step of updating the bandwidth usage associated with the first said next hop router, comprises the step of updating in a table, the current bandwidth usage with the estimated bandwidth usage.

The Examiner asserts that Klinker updates in a table the current bandwidth usage with the estimated bandwidth usage. However, Applicant asserts that the passage cited by the Examiner does not include any indication that a table is used, much less updated. (Col. 20, lines 13-20.) Furthermore, while Klinker includes a routing table, that table is used to update routes, or paths, that meet minimum service levels (e.g., no violations of SLA, or no unacceptable deviations from agreed upon performance metrics as defined by the associated flow policy). (Col. 21, lines 25-29.) The routing table is not used to update current bandwidth usage with the estimated bandwidth usage. Accordingly, claim 4 is not anticipated.

Response to Examiner's Arguments in the Advisory Action

Applicant respectfully submits that the Examiner did not address, in the Advisory Action, the merits of the specific language added to claims 1, 9 and 10 in the Rule 1.116 Amendment filed on June 4, 2008. Although the Examiner discusses certain claim limitations in the Advisory Action, there is no apparent discussion therein with regard to basing a routing decision on the bandwidth usage of the link to said next hop router, which was added to claims 1, 9 and 10.

New Claims are also Allowable

Applicant submits that the new claims 13-22 are also allowable over the applied art of record. Specifically, claims 13-22 depend from claims which are believed to be allowable and recite a combination of features which are clearly not disclosed or suggested by the applied art of record. Accordingly, Applicant respectfully requests consideration of these claims and further request that the above-noted claims be indicated as being allowable.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant submits that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicant hereby makes a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 09-0457.

Respectfully submitted,



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